



# ISOPROPYL CHLOROFORMATE

UN 2407

Shipping Name: Isopropylchloroformate

Other Names: Chloroformic acid, isopropyl ester

Isopropyl chlorocarbonate

2-Propyl chloroformate



**WARNING! • EXPLOSIVE! CONTAINERS HAVE EXPLODED EVEN WHEN REFRIGERATED!**

## Hazards:

- Severely irritating to skin, eyes, nose and lungs; may cause burns and blindness
- Fire fighting gear (including SCBA) does not provide adequate protection. If exposure occurs, remove and isolate gear immediately and thoroughly decontaminate personnel
- Highly flammable
- Container may BLEVE or explode when exposed to fire
- Vapors are heavier than air and will collect and stay in low areas
- Vapors may travel long distances to ignition sources and flashback
- Vapors in confined areas (e.g., tanks, sewers, buildings) may explode when exposed to fire
- Decomposes upon heating to form toxic hydrogen chloride

## Awareness and Operational Level Training

### Response:

- Stay upwind and uphill
- Determine the extent of the problem
- Isolate a wide area around the release and deny entry
- Remove all ignition sources
- For container exposed to fire evacuate the area in all directions because of the risk of BLEVE or explosion
- Evacuate the immediate area and downwind for a large release
- Notify local health and fire officials and pollution control agencies
- If material or contaminated runoff enters waterways, notify downstream users of potentially contaminated water

## Description:

- Colorless liquid
- Pungent irritating odor
- Sinks in water and is insoluble in water
- Reacts slowly with water to form toxic hydrochloric acid
- Highly flammable
- Vapors are heavier than air and will collect and stay in low areas

## Operational Level Training Response:

### RELEASE, NO FIRE:

- Stop release if it can be done safely from a distance
- Prevent material and runoff from entering sewers and waterways if it can be done safely well ahead of the release
- Use large amounts of water to disperse vapors - contain runoff
- Consider the application of foam to large areas of spilled liquid to control vapors
- Ventilate confined area if it can be done without placing personnel at risk

### FIRE:

- Approach fire with extreme caution; consider letting fire burn
- Specially trained personnel operating from a safe distance can fight fires using foam or dry chemical if available in sufficient amounts. Under favorable conditions, experienced crews can use coordinated fog streams to sweep the flames off the surface of the burning liquid. Keep exposures cool to protect against re-ignition. Do not direct straight streams into the liquid.
- Cool exposed containers with large quantities of water from unattended equipment or remove intact containers if it can be done safely
- If cooling streams are ineffective (unvented container distorts, bulges or shows any other signs of expanding), withdraw immediately to a secure location

## First Aid:

- Provide Basic Life Support/CPR as needed
- Decontaminate the victim as follows:
  - ◆ Inhalation - remove the victim to fresh air and give oxygen if available
  - ◆ Skin - remove and isolate contaminated clothing (including shoes) and wash skin with soap and large volumes of water for 15 minutes
  - ◆ Eye - rinse eyes with large volumes of water or saline for 15 minutes
  - ◆ Swallowed - do not make the victim vomit
- Seek medical attention
- Toxic effects may be delayed
- For skin burns decontaminate with water and apply a clean dry dressing

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